



# Metalon® Conductive Inks for Printed Electronics

[www.novacentrix.com](http://www.novacentrix.com)

## Metalon® HPS-FG149A Silver Dispensing Ink

- Particle:** 0.3 micron silver flake
- Substrates:** Paper, plastics, glass, metals, fabrics
- Features:** Solderable, flexible, excellent water resistance, fast-curing  
Adheres well to a variety of substrates.

### Thermal cure data:

Substrate	Temperature (°C)	Time (minutes)	Sheet Resistance (Ω/sq) <sup>1</sup>	Volume Resistivity <sup>2</sup> (Ω-cm)	Sheet Resistivity <sup>2</sup> (Ω/sq/mil)	Crosshatch Adhesion
Melinex ST505	80	30	0.055	6.10E-05	0.025	5B
	100	30	0.04	4.40E-05	0.018	5B
	125	15	0.03	3.40E-05	0.014	5B
	140	10	0.024	2.70E-05	0.011	5B
Kapton HN	175	10	0.018	2.00E-05	0.008	5B
	200	10	0.013	1.50E-05	0.006	5B
	225	5	0.01	1.00E-05	0.004	5B

<sup>1</sup> At 0.05 kg/m<sup>2</sup> dry ink coverage (150cm<sup>2</sup>/g wet ink), <sup>2</sup>At 25% porosity

<b>Physical Properties</b>	<p><b>General Description</b> ..... Ag flake ink in Dowanol PM</p> <p><b>Viscosity (typical values)</b> ..... 22,000cP at 10sec<sup>-1</sup>; 6,000cP at 100 sec<sup>-1</sup></p> <p><b>Specific Gravity</b> ..... 3.1</p> <p><b>Flash Point</b> ..... 31 °C</p> <p><b>Particle Size</b> ..... D50 - 0.4 micron D90 - 0.7 micron</p> <p><b>Ag Content</b> ..... 77 wt%</p>
<b>Storage and Printing</b>	<p><b>Storage</b> ..... &lt;25 °C (less than &lt;5 °C for maximum conductivity retention)</p> <p><b>Shelf life</b> ..... 6 months</p> <p><b>Cleaning solvent</b> ..... Isopropanol</p> <p><b>Dispensing method</b> ..... Various (e.g., syringe, Nordson PICO® Ppulse, etc.)</p>
<b>Shipping and Packaging</b>	Standard sample order is 100g or multiples of 100g. Inquire directly for packaging of larger quantities.

[www.novacentrix.com](http://www.novacentrix.com)  
 Contact us today to learn more.  
[inkstechnicalsupport@novacentrix.com](mailto:inkstechnicalsupport@novacentrix.com)